

WHAT IS CLAIMED IS:

1. A method operating comprising the steps of:
receiving information identifying a higher-level alarm associated with a SONET facility;
receiving information identifying a lower-level alarm associated with the SONET facility;
determining minutes of outage in response to receiving the information identifying the higher-level alarm associated with the SONET facility and the information identifying the lower-level alarm associated with the SONET facility.
2. A method of operating as set forth in claim 1, further comprising the step of receiving maintenance information and performing the step of determining minutes of outage in response to receiving the maintenance information.
3. A method of operating as set forth in claim 1, wherein the step of determining minutes of outage includes correlating the information identifying a higher-level alarm associated with a SONET facility with the information identifying a lower-level alarm with the SONET facility.
4. A method of operating as set forth in claim 1, wherein the information identifying a higher-level alarm associated with the SONET facility defines a first time period and the information identifying a lower-level alarm associated with the SONET facility defines a second time period and the step of determine minutes of outage further comprises the step of subtracting the overlap between the first time period and the second time period.

5. A method of determining minutes of outage comprising the steps of:
 - acquiring facility hierarchy information, the facility hierarchy information depicting a facility hierarchy, the facility hierarchy including levels;
 - determining outage for each of the levels in the facility hierarchy in response to acquiring the facility hierarchy information; and
 - determining minutes of outage in response to determining the outage for each of the levels in the facility hierarchy.
6. A method of operating as set forth in claim 5, wherein the facility hierarchy information details a SONET facility hierarchy.
7. A method of operating as set forth in claim 5, wherein the levels include and OC48 level.
8. A method of operating as set forth in claim 5, wherein the levels include and OC1 level.
9. A method of operating as set forth in claim 5, wherein the step of determining minutes of outage further comprises the step of correlating the outage for each of the levels.
10. A method of operating as set forth in claim 9, wherein the levels include higher-levels and lower-levels and the step of correlating the outage further comprises the step of correlating the outage between the higher levels and the lower levels.
11. A method of operating as set forth in claim 9, wherein the levels include higher-levels and lower-levels and the step of correlating the outage further comprises

the step of subtracting overlap between outage of the higher-levels and outage of the lower-levels.

12. A method of determining minutes of outage comprising the steps of:
 - operating a database storing facility hierarchy information representing a facility hierarchy;
 - receiving alarm information;
 - identifying new facility information representing at least one new facility in response to receiving the alarm information;
 - storing updated facility hierarchy information by inserting the new facility information into the database in response to identifying the new facility information, the updated facility hierarchy information representing an updated facility hierarchy; and
 - determining minutes of outage in response to creating an updated facility hierarchy.
13. A method of determining minutes of outage as set forth in claim 12, wherein the alarm information is received in response to polling.
14. A method of determining minutes of outage as set forth in claim 12, wherein the alarm information is formatted as a data stream.
15. A method of determining minutes of outage as set forth in claim 12, wherein the updated facility hierarchy comprises the facility hierarchy information in combination with the new facility hierarchy information.
16. A method of determining minutes of outage as set forth in claim 12, further comprising the step of removing duplicate alarm information in response to receiving the alarm information and identifying new facility information in response to removing the duplicate alarm information.

17. A method of determining minutes of outage as set forth in claim 12, wherein the step of determining minutes of outage further comprises the step of performing correlation on the updated facility hierarchy information.